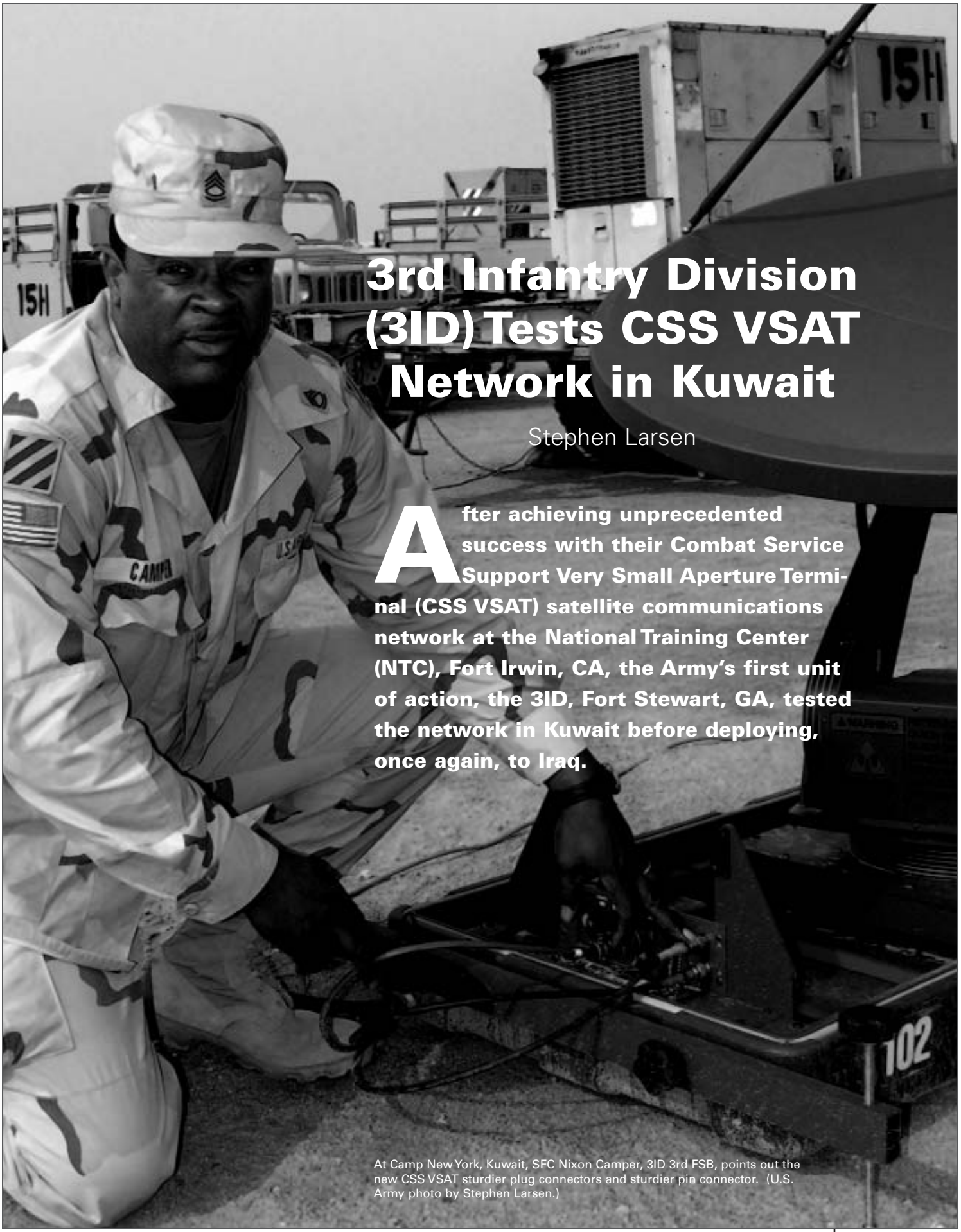

3rd Infantry Division (3ID) Tests CSS VSAT Network in Kuwait

Stephen Larsen

After achieving unprecedented success with their Combat Service Support Very Small Aperture Terminal (CSS VSAT) satellite communications network at the National Training Center (NTC), Fort Irwin, CA, the Army's first unit of action, the 3ID, Fort Stewart, GA, tested the network in Kuwait before deploying, once again, to Iraq.

At Camp New York, Kuwait, SFC Nixon Camper, 3ID 3rd FSB, points out the new CSS VSAT sturdier plug connectors and sturdier pin connector. (U.S. Army photo by Stephen Larsen.)

The combination of the CSS VSAT and the Combat Service Support Automated Information Systems Interface (CAISI) — a wireless interface that plugs the system into a local area network (LAN), or to a wide area network — increases readiness by giving CSS Soldiers in the field the ability to electronically transmit supply requisitions and receive near-real-time status reports on their orders 24/7.

The use of CSS VSAT/CAISI — which were fielded to the 3ID by the Product Manager Defense Wide Transmission Systems (PM DWTS), part of the Fort Monmouth, NJ-based Project Manager Defense Communications and Army Transmission Systems (PM DCATS) — also enhances force protection by greatly reducing the need for Soldiers to convoy detailed logistics orders to other locations or travel to maintenance meetings, which they now can conduct "virtually" via CSS VSAT/CAISI.

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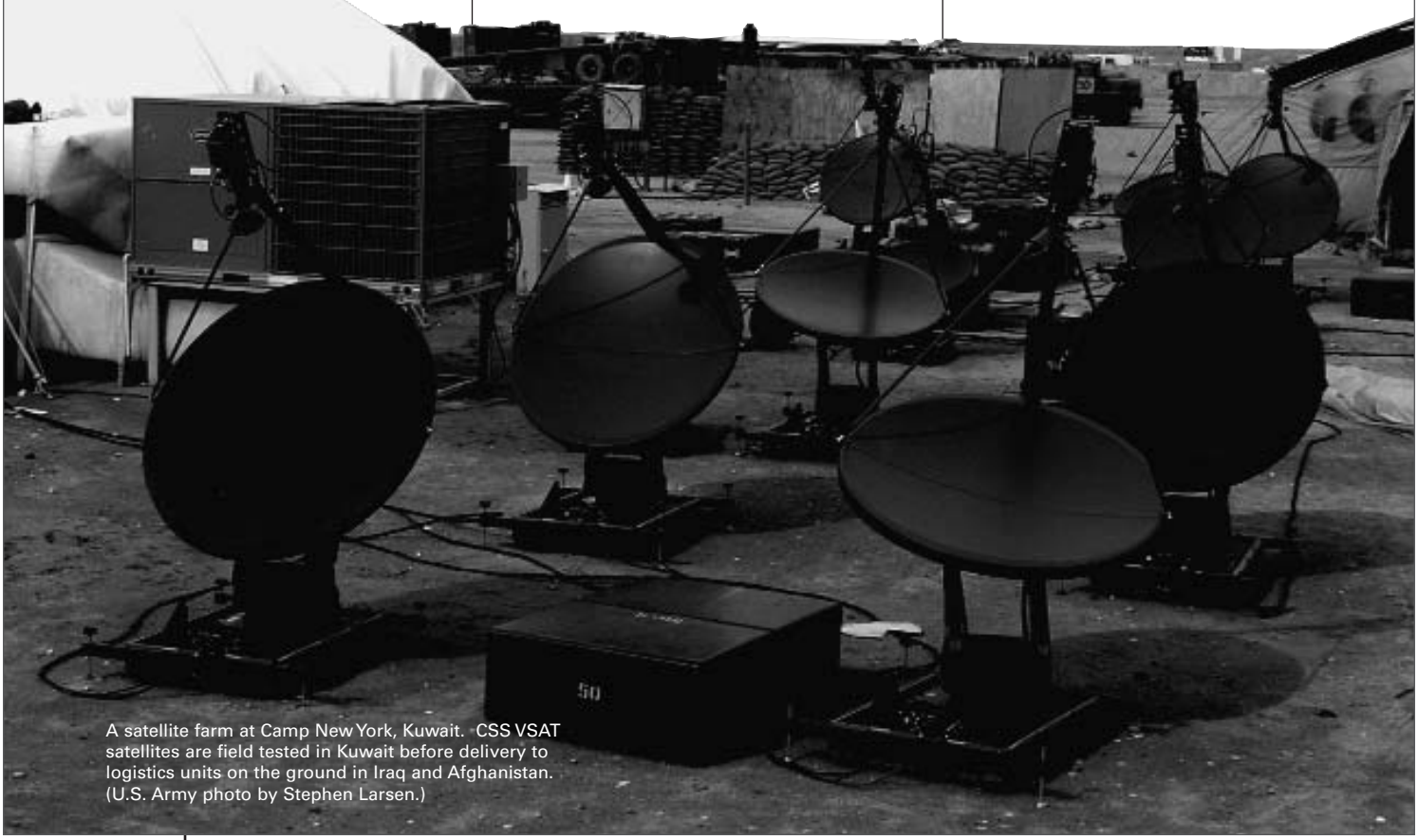
As part of a full-combat rehearsal at Camp Beuhring, Kuwait, the 3ID — which was the first coalition unit into Baghdad during the ground war — conducted a "Standard Army Management Information Systems (STAMIS) gunnery" — a test of how well their CSS VSAT network could transmit data from software packages such as Unit Level Logistics System-Ground (ULLS-G), Standard Army Maintenance System (SAMS), Standard Army Retail Supply System (SARSS) and Property Book and Unit Supply-Enhanced (PBUSE). These STAMIS products were provided by the PM Logistics Information Systems, Fort Lee, VA, which like PM DCATS/PM DWTS, is also part of Program Executive Officer Enterprise Information Systems.

"This is a first-time functional check of the computers and data," remarked 3ID's Combat Service Support Automation Management Officer (CSSAMO) MAJ Angel Nieves. "We're also executing a connectivity check of every station on our network, including the Supply Support Activity — the main parts warehouse and central point for all 3ID logistics commodities in theater," Nieves continued.

On Jan. 19, 2005, the 603rd Aviation Support Battalion became the first 3ID unit to successfully deploy a CSS VSAT into Iraq.



A satellite farm at Camp New York, Kuwait. CSS VSAT satellites are field tested in Kuwait before delivery to logistics units on the ground in Iraq and Afghanistan. (U.S. Army photo by Stephen Larsen.)

PM DWTS Supports Fielding Initiative

The 3ID was supported in deploying their CSS VSAT network into Kuwait and Iraq by a fielding team from PM DWTS. According to MAJ Michael Devine, Assistant PM DWTS-Belvoir, his team's fielding of CSS VSAT/CAISI to the 3ID ties in with the Army's three-tiered Joint Network Transport Capability-Spiral initiative, which includes the "Connect Army Logisticians" program, the Joint Network Node and the Trojan Special Purpose Integrated Remoted Intelligence Terminal.

"These are all designed to give the Army the ability to communicate reliably in a nonlinear battlespace," Devine explained. "These programs will increase bandwidth available to troops, provide an Internet protocol architecture and give warfighters and their commanders access to the .mil network."

In Kuwait, 3ID's Soldiers were enthusiastic about the capabilities the CSS VSAT network added to their arsenal, such as nearly instant connectivity and the dish ability to autopoint themselves to the correct satellite.

"We can jump to a new location, set this up and be 'hot' (set up and transmitting data) in 20 minutes — even on a bad day," said SFC Nixon Camper, 3ID's 3rd Forward Support Battalion (FSB). "With the autopoint feature, once you turn on antenna power, it does everything on its own. If I can figure out how to use it, it's not that hard to do," Nixon said.

"It [the CSS VSAT] makes our job 100 percent easier," said SGT Scott Sallis, 3ID 3rd FSB. "It's user-friendly. I'm not a computer guru, but I don't have to be with the CSS VSAT."

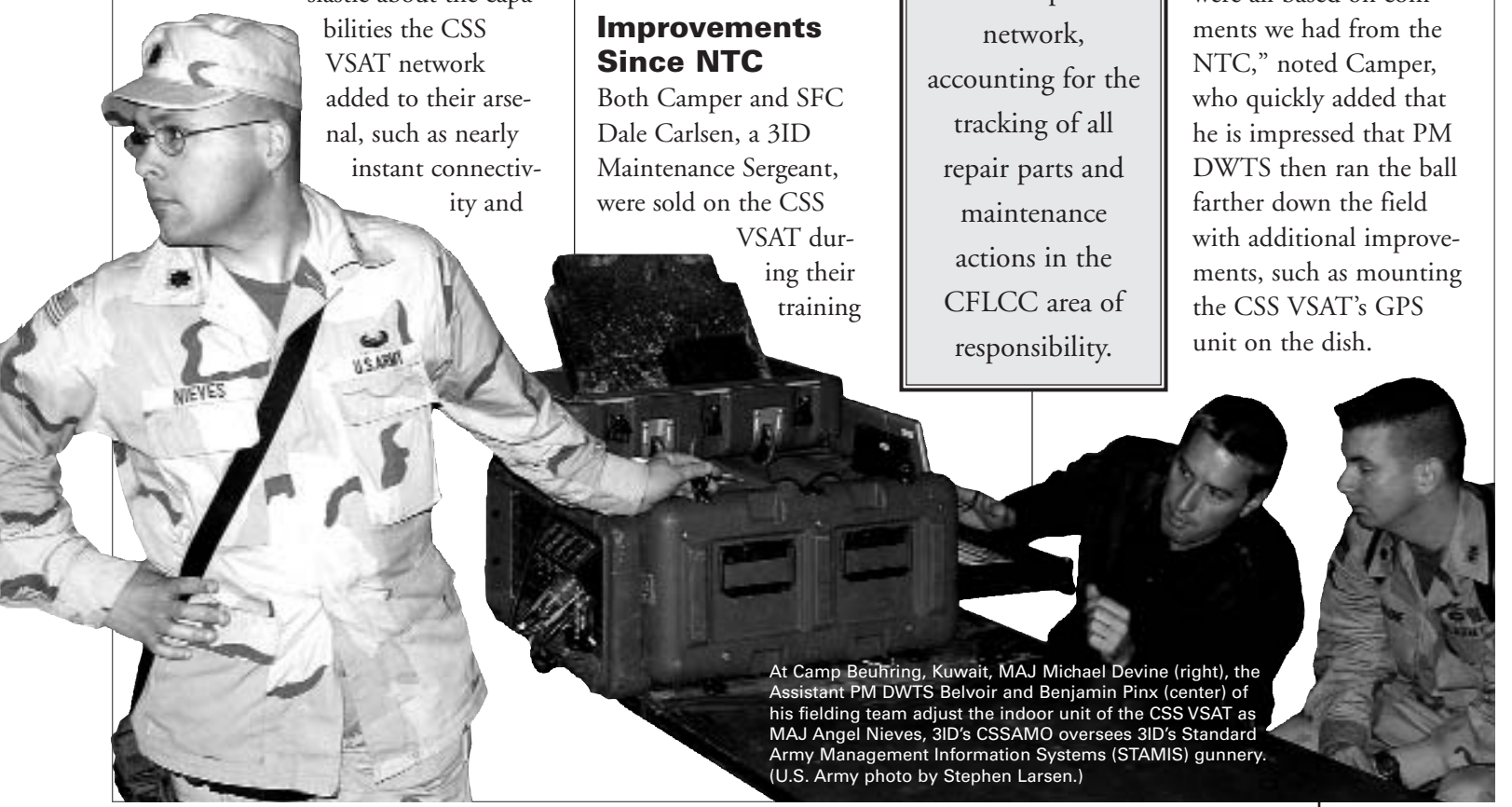
Improvements Since NTC

Both Camper and SFC Dale Carlsen, a 3ID Maintenance Sergeant, were sold on the CSS VSAT during their training rotation exercises at NTC last year. But, the 3ID Soldiers agreed that the PM improved the already-robust system in the time since they used it at NTC. "The PM listened," said Camper. "They came out [to NTC] and listened to what we had to say."

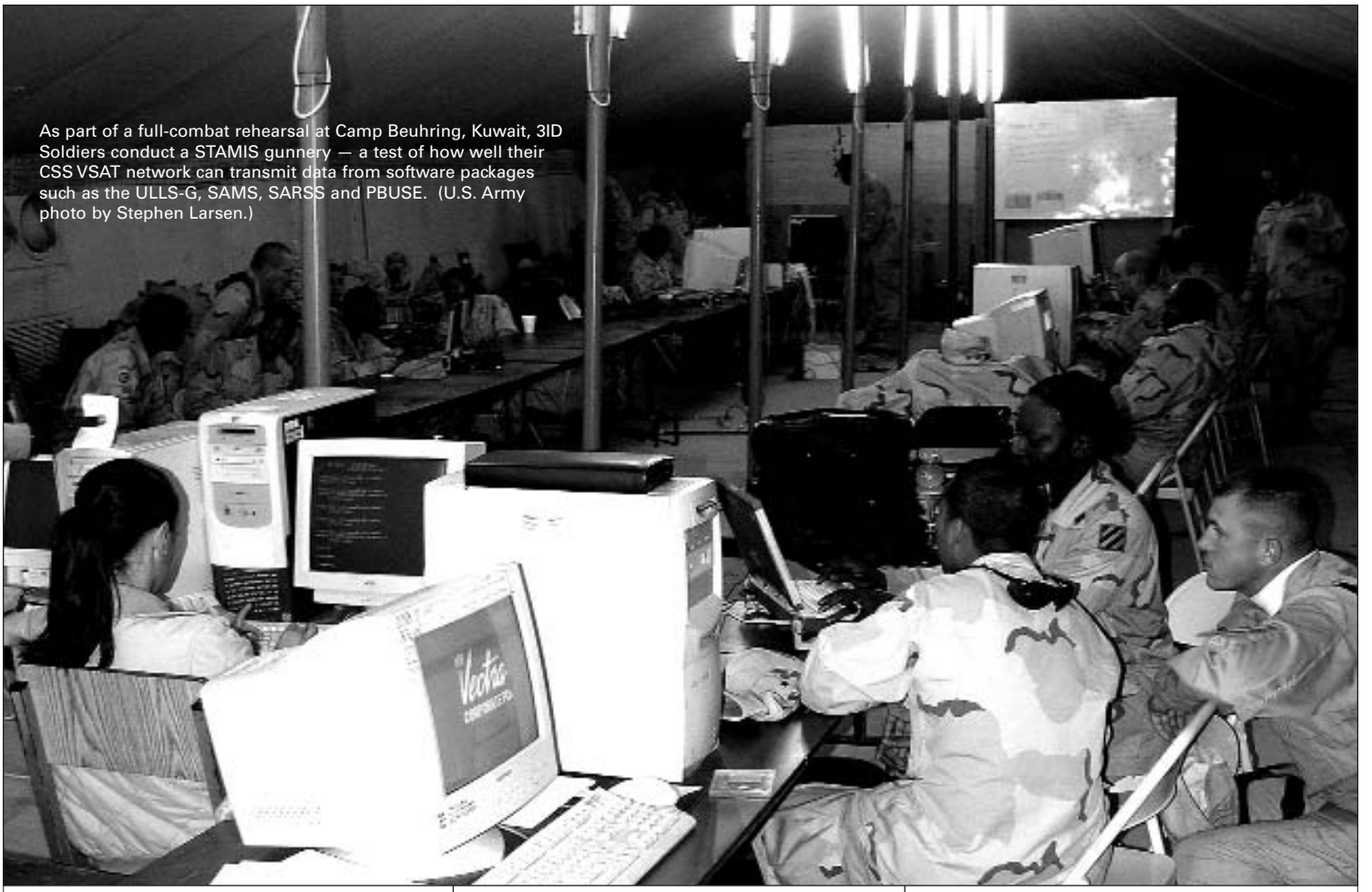
> The 3ID will soon merge their CSS VSAT network with the VSAT network currently being used in SWA by the CFLCC. More than 200,000 transactions per day will pass over the combined CSS VSAT/CFLCC command, control, communications and computers network, accounting for the tracking of all repair parts and maintenance actions in the CFLCC area of responsibility.

As evidence, Camper pointed out that the new CSS VSAT includes sturdier plug connectors, with screw-on threads, and a sturdier pin connector. Instead of two Global Positioning System (GPS) cables, now there is only one cable, which makes it greatly easier to unreel. Before, one cable usually wound up longer than the other.

"These improvements were all based on comments we had from the NTC," noted Camper, who quickly added that he is impressed that PM DWTS then ran the ball farther down the field with additional improvements, such as mounting the CSS VSAT's GPS unit on the dish.



At Camp Beuhring, Kuwait, MAJ Michael Devine (right), the Assistant PM DWTS Belvoir and Benjamin Pinx (center) of his fielding team adjust the indoor unit of the CSS VSAT as MAJ Angel Nieves, 3ID's CSSAMO oversees 3ID's Standard Army Management Information Systems (STAMIS) gunnery. (U.S. Army photo by Stephen Larsen.)



As part of a full-combat rehearsal at Camp Beuhring, Kuwait, 3ID Soldiers conduct a STAMIS gunnery — a test of how well their CSS VSAT network can transmit data from software packages such as the ULLS-G, SAMS, SARSS and PBUSE. (U.S. Army photo by Stephen Larsen.)

Previously, the GPS unit was part of the CSS VSAT's indoor module, which was usually set up in a building or tent when deployed, making it more difficult to locate the satellite.

Also, the outrigger, which steadies the dish, is now sturdier and user-friendly to set up and move, and it can now be cranked manually.

Other improvements are weep holes in the outrigger's base, which let water drain out. "When it rains here [in Southwest Asia (SWA)], it really rains," said Camper. "Now the water won't collect in the bottom."

> In Kuwait, 3ID's Soldiers were enthusiastic about the capabilities the CSS VSAT network added to their arsenal, such as nearly instant connectivity and the dish ability to autopoint themselves to the correct satellite.

Camper and other 3ID Soldiers were surprised to find that the new CSS VSAT actually has a slightly larger satellite dish — 1.2 meters in diameter, compared to .96 meters for the dish they used at the NTC. But they thought the dish was smaller because it now comes in two pieces that interlock, making it light enough that one Soldier can lift and assemble it.

Additionally, the new CSS VSAT model has a smaller logistics footprint on the battlefield — it fits into four transit cases as opposed to five cases for the prototype model — and weighs 519 pounds versus 609 pounds.

Merging With the CFLCC C4 VSAT Network

The 3ID will soon merge their CSS VSAT network with the VSAT network currently being used in SWA by the Coalition Forces Land Component Command (CFLCC). More than 200,000 transactions per day will pass over the combined CSS VSAT/CFLCC command, control, communications and computers (C4) network, accounting for the tracking of all repair parts and maintenance actions in the CFLCC area of responsibility.

"This is the real-world test," extolled Ronald Saxton, of CFLCC C4 Logistics Automation cell, Camp Arifjan, Kuwait, "to see how well they'll work together in Iraq. As a separate network, the CFLCC's C4 VSAT network has worked well, as has the 3ID's CSS VSAT."

"There have been no hiccups in sending and receiving data or getting status of parts," Saxton continued. "It's like plugging into a LAN here at Camp Arifjan. By having this connectivity, we can get a global view of what parts different units are ordering and track various trends."

Saxton called the CFLCC C4 VSAT network, which was also provided by PM DWTS, "a lifesaver" — literally and figuratively. "If Soldiers didn't have the means to order ammo, where do you think they'd be?" Saxton asked. "Units are usually stationed out in the middle of nowhere, and the VSATs give Soldiers the ability to order ammo for their tanks or individual weapons," Saxton continued.

Additionally, having the VSAT network to pass logistics data keeps Soldiers off the road and away from improvised explosive devices or insurgent ambushes.

> The 3ID is once again leading the Army in conducting the reception, staging, onward movement and integration processes needed to transform personnel and materiel arriving into an area of operations into forces capable of meeting operational requirements.

Contractors Deployed With Network

A team of TAMSCO contractors from Calverton, MD, keeps the CFLCC C4 network up and running. The team was hired by PM DWTS to live and work in Kuwait, Germany, Iraq and Afghanistan — traveling to multiple locations, whenever needed — to maintain the network. The help-desk team, which is based at Camp Arifjan, is led by Jose Ilarraza and includes Jeff Drehobl, Amy Hamilton, Randle Holloway, Ty Jackson, Amy Matotek, Cliff Timpson and Brad Welch.

"At the help desk, we monitor all the remote sites in Iraq, and when we can't troubleshoot over the phone, we must travel to the site to fix them," said Ilarraza. "Calls include things like the modem not working, dish not being aligned, heat fried the cable and it's now brittle and has to be replaced, or sometimes a mortar round or shrapnel hit a site," Ilarraza explained.

"I can't say enough about these people," said LTC Earl Noble, PM DWTS, who hired Ilarraza and his team. "They're away from their families for at least a year at a time. Some of them have been shot at and they are subject to car bomb and mortar attacks; but they stay here and do the job for our Soldiers."

"This is a great team and a great organization," said Ilarraza, who was a Soldier for 12 years and a government employee in SWA for 7 months before coming back as a contractor for PM DWTS. "This mission is vital. A great chance to do my part for my country and for the Soldiers and to be a part of a great team of technicians."

The next challenge is to merge the 3ID CSS VSAT network with the CFLCC C4 VSAT network. The 3ID's Soldiers and PM DWTS personnel working the project are confident that this will be successful.

"There are the same issues you face if you're going to hook up a computer in someone else's house, such as fire walls and routing protocols," said CW2 Angel Montero, 3ID CSSAMO technician. "We're used to these types of challenges and we'll get the job done."

Devine has no doubt this operation will be successful and commented that the 3ID is once again leading the Army in conducting the reception, staging, onward movement and integration (RSOI) processes needed to transform personnel and materiel arriving into an area of operations into forces capable of meeting operational requirements.

"MAJ Nieves and CW2 Montero continue to set the standard for Army CSSAMOs by conducting the first ever RSOI STAMIS Gunnery over VSAT from Camp Beuhring," said Devine. "We are currently capturing lessons learned and tactics, techniques and procedures that we'll incorporate into future deployments."

STEPHEN LARSEN is the Public Affairs Officer for the Project Manager Defense Communications and Army Transmission Systems at Fort Monmouth, NJ. He has more than 20 years' experience writing about Army systems. Larsen has a B.A. in American studies from the College of Staten Island of the City University of New York.

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